Atlantic Wood Industries

Portsmouth, VirginiaSuperfund Program Site Fact Sheet

Type of Facility: Wood Preserving

Contaminants: Creosote, Pentachlorophenol (PCP), Chromium, Arsenic

Funding: Enforcement financed

Site Description and History

Atlantic Wood Industries operated a wood preserving facility on a 47.5-acre site along the Elizabeth River in Portsmouth, Virginia, from 1926 to 1990. Both creosote and PCP processes were used. The site was placed on the National Priorities List (NPL) on August 30, 1990.

Concern at the site is focused on raw material, finished product storage areas, and the plant processing area. Waste present includes soils contaminated by leakage from four aboveground tanks containing waste liquid creosote, 20,000 cubic feet of land filled creosote, and PCP contaminated wood chips. Groundwater is not used as a water source within a three-mile radius of the site. Public utilities supply water in this area. In 1986, Atlantic Wood Industries removed (removal #1) the four aboveground storage tanks containing 350,000 gallons of liquid creosote waste. Under a Consent Order with the Environmental Protection Agency (EPA), the facility excavated and sealed the storm sewer system next to Elm Avenue.

Work on the storm sewer project was completed in the summer of 1995, reducing contaminant infiltration in the groundwater and surface runoff into the Elizabeth River. Contaminated sediment at the outfall from the storm sewer system (removal #2) next to the Elizabeth River was also removed. Contaminated soil generated in the storm sewer and outfall removal project, as a part of OU-1, was stored on site in lined containers to be processed with the rest of the soils to be remediated. Since the OU-1 phase is still in the Remedial Design (RD) phase, those stored soils were removed and disposed separately in 1997.

The Record of Decision (ROD) for OU-1 (contaminated soils) was signed on September 29, 1995. The ROD identified ex-situ bioremediation of the soil with on site placement as the optimum plan. The alternate plan, should the optimal plan not reach minimum acceptable standards, is designated to be low temperature thermal desorption.

Threats and Contaminants

Benzene, toluene, xylenes, and naphthalenes have been detected in the air. Creosote, pentachlorophenol (PCP), and other contaminants from former wood treating processes have

been detected in the groundwater and soils. Polynuclear aromatic hydrocarbons (PAHs) are insite sediments. Off-site sediments also contain phenol and PCP. PCP, arsenic, and chromium have been detected in surface water near the site. Direct contact or ingestion of soil on site could harm people. Coming in direct contact with materials that have moved off site or inhaling dust from the site also poses a threat to health. Oyster beds are within three miles downstream. Studies by the Virginia Institute of Marine Science have shown that oysters within this distance have accumulated levels of creosotes.

Current Site Status

The ROD for OU-1 was signed on September 29, 1995. It consists of remedial work involving surface soils, sediments, and dense non-aqueous phase liquid in the subsoils on site. The selected remedy was ex-situ bioremediation of soils. The Norfolk District of the U.S. Army Corps of Engineers (USACE) is proceeding with the scope of work for the RD on OU-1. The U.S. Navy has acknowledged some responsibility for pollution near the site and has agreed to cooperate with Atlantic Wood and USACE in the cleanup of the site. All parties involved met and field-reviewed the site in January 1998.

The groundwater on site is covered under OU-2. The EPA tentatively approved the work plan for the remedial investigation at OU-2 in a letter dated November 20, 1998. OU-3 addresses the water quality impacts of the site on the Elizabeth River.

The National Oceanographic and Atmospheric Administration (NOAA) is currently preparing a sampling plan for OU-3. The sampling plan is intended to determine contamination from the Atlantic Wood Site on the south branch of the Elizabeth River. Ultimately, the study results are intended to help in developing site-specific cleanup levels.

Community Relations and Concerns

This facility has been named as a pollution source to the Elizabeth River in studies by the Chesapeake Bay Foundation and the Virginia Institute of Marine Science. A very strong anti-incineration citizen's lobby resides in the area. If incineration is chosen as a soil remedy, organized public opposition is expected.

The Community Relations Plan for the site was updated in January 1991. On July 8, 1995, a public hearing was conducted near the site in Portsmouth, Virginia. Public comments were collected and answered on the project before the end of the comment period for OU-1.

VDEQ Representative	Information Repository
Devlin Harris Remedial Project Manager Virginia Department of Environmental Quality P. O. Box 10009 Richmond, VA 23240-0009 (804) 698-4226, Fax (804) 698-4234 E-mail dmharris@deq.virginia.gov	Portsmouth Public Library 601 Court Street Portsmouth, VA 23704 (804) 393-8501